

On the coefficient multipliers theorem of Hardy and Littlewood

Avkhadiiev F., Wirths K.

Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia

Abstract

Let $a_n(f)$ be the Taylor coefficients of a holomorphic function f which belongs to the Hardy space H_p , $0 < p < 1$. We prove the estimate $C(p) \leq \pi p / [p(1 - p)]$ in the Hardy-Littlewood inequality. We also give explicit estimates for sums $\sum |a_n(f) \lambda_n|^s$ in the mixed norm space $H(1, s, \beta)$. In this way we obtain a new version of some results by Blasco and by Jevtić and Pavlovič.
